INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/37257

| A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : B01D 47/12, 53/14 US CL : 96/290, 352, 416, 242 According to International Patent Classification (IPC) or to both national classification and IPC | | | | | |
|---|--|---|-----------------------|--|--|
| B. FIEL | DS SEARCHED | | | | |
| Minimum documentation searched (classification system followed by classification symbols) U.S.: 96/290, 329, 351, 352, 416, 242; 261/115, 121.1, 126 | | | | | |
| Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched | | | | | |
| Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Please See Continuation Sheet | | | | | |
| | UMENTS CONSIDERED TO BE RELEVANT | | | | |
| Category * | Citation of document, with indication, where a | | Relevant to claim No. | | |
| x | US 4,661,130 A (EBELING et al) 28 April 1987 (2 | 8.04.1987), figures, col. 2, lines 30-37, | 1, 2, 7 | | |
| Ÿ | col. 3, lines 15-47, col. 4, lines 5-55 | · | 3-6, 8-17 | | |
| x | US 2,070,578 A (BOWMAN) 16 February 1937 (16 | 5.02.1937), figure, col. 1, line 13 to col. | 1, 2 | | |
| Y | US 3,465,504 A (OROPEZA et al) 09 September 19 | 969 (09.09.1969), figure 1, col. 2, lines | 3, 12 | | |
| Y | US 3,957,464 A (TELLER) 18 May 1976 (18.05.19 | 976), abstract, col. 6, lines 8-15 | 4, 5, 13, 14 | | |
| Y | US 2002/0110511 A1 (KLINGSPOR et al) 15 August 2002 (15.08.2002), abstract, paragraph 0006 | | 6, 15 | | |
| Y | US 4,247,532 A (SALETAN et al) 27 January 1981 | (27.01.1981), Col. 7, Tiles 23-04 | 9-17 | | |
| Further | documents are listed in the continuation of Box C. | See patent family annex. | | | |
| Special categories of cited documents: | | "T" later document published after the inter date and not in conflict with the applica | | | |
| | defining the general state of the art which is not considered to be lar relevance | principle or theory underlying the inves | ntion | | |
| | plication or patent published on or after the international filing date | "X" document of particular relevance; the considered novel or cannot be consider when the document is taken alone | | | |
| | which may throw doubts on priority claim(s) or which is cited to the publication date of another citation or other special reason (as | "Y" document of particular relevance; the considered to involve an inventive step | when the document is | | |
| "O" document | referring to an oral disclosure, use, exhibition or other means | combined with one or more other such being obvious to a person skilled in the | | | |
| "P" document published prior to the international filing date but later than the priority date claimed | | "&" document member of the same patent f | · | | |
| Date of the actual completion of the international search | | Date of mailing of the international search report 0 6 APR 2005 | | | |
| 21 March 2005 (21.03.2005) | | | | | |
| Name and mailing address of the ISA/US Mail Stop PCT, Atm: ISA/US | | Authorized officer | | | |
| Сол | missioner for Patents | Frank M. Lawrence tean Process | | | |
| P.O. Box 1450 Alexandria, Virginia 22313-1450 | | Telephone No. 571-272-0987 | apriliana. | | |
| Facsimile No. | . (703) 305-3230 | | V 11 | | |

Form PCT/ISA/210 (second sheet) (January 2004)

| INTERNATIONAL SEARCH REPORT | International application No. PCT/US04/37257 | |
|---|--|--|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | · | |
| | | |
| | | |
| | | |
| Sp. Typy DG GE 4 DCHED Item 2 | | |
| Continuation of B. FIELDS SEARCHED Item 3: DERWENT search terms: diffuser, bubbles, spray | | |
| · | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Form PCT/ISA/210 (extra sheet) (January 2004)